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PTO/SB/01 (12-97)  
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Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

<b>DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)</b>  <input type="checkbox"/> Declaration Submitted with Initial Filing      OR <input checked="" type="checkbox"/> Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)	<b>Attorney Docket Number</b>	MSI 100
	<b>First Named Inventor</b>	Frank B. Dean
	<b>COMPLETE IF KNOWN</b>	
	<b>Application Number</b>	09 / 514,113
	<b>Filing Date</b>	February 25, 2000
	<b>Group Art Unit</b>	
	<b>Examiner Name</b>	

**As a below named inventor, I hereby declare that:**

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**METHOD FOR REDUCING ARTIFACTS IN  
NUCLEIC ACID AMPLIFICATION**

the specification of which  
☐ is attached hereto  
OR  
☒ was filed on (MM/DD/YYYY) **02/25/2000** as United States Application Number or PCT International Application Number **09/514,113** and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)

☐ Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

MSI 100  
15122/2

Filed: February 25, 2000

Title: Method for Reducing Artifacts in Nucleic Acid Amplification

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PTO/SB/01 (12-97)  
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## DECLARATION — Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

☐ Customer Number

OR

☒ Registered practitioner(s) name/registration number listed below

Place Customer  
Number Bar Code  
Label here

Name	Registration Number	Name	Registration Number
Patrea L. Pabst	31,284		
Robert A. Hodges	41,074		
Kevin W. King	42,737		

☐ Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

Direct all correspondence to: ☐ Customer Number or Bar Code Label ☐ OR ☒ Correspondence address below

Name	Patrea L. Pabst				
Address	Arnall Golden & Gregory, LLP				
Address	2800 One Atlantic Center, 1201 West Peachtree Street				
City	Atlanta	State	GA	ZIP	30309-3450
Country	United States	Telephone	(404)873-8794	Fax	(404)873-8795

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any])	Family Name or Surname
Frank B.	Dean

Inventor's Signature	Frank B. Dean				Date	3/14/2000	
Residence: City	Guilford	State	CT	Country	USA	Citizenship	US
Post Office Address	21A Pearl Street						
Post Office Address							
City	Guilford	State	CT	ZIP	06437	Country	USA

☒ Additional inventors are being named on the 1 supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto

Filed: February 25, 2000

Title: Method for Reducing Artifacts in Nucleic Acid Amplification

Please type a plus sign (+) inside this box → ☐

PTO/SB/02A (3-97)  
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+

## DECLARATION

ADDITIONAL INVENTOR(S)  
Supplemental Sheet  
Page 1 of 1

Name of Additional Joint Inventor, if any:

☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any])

Family Name or Surname

A. Fawad

Faruqi

Inventor's  
Signature

03/14/00  
Date

Residence: City

Guilford

State

CT

Country

USA

Citizenship

PK

Post Office Address

985 Durham Road

Post Office Address

City

Guilford

State

CT

ZIP

06437

Country

USA

Name of Additional Joint Inventor, if any:

☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any])

Family Name or Surname

Inventor's  
Signature

Date

Residence: City

State

Country

Citizenship

Post Office Address

Post Office Address

City

State

ZIP

Country

Name of Additional Joint Inventor, if any:

☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any])

Family Name or Surname

Inventor's  
Signature

Date

Residence: City

State

Country

Citizenship

Post Office Address

Post Office Address

City

State

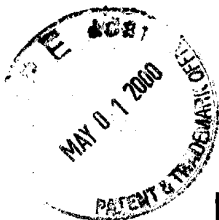
ZIP

Country

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MSI 100

15122/2



PTO/SB/10 (1-99)  
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**STATEMENT CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(f) & 1.27(c))--SMALL BUSINESS CONCERN**

Docket Number (Optional)  
MSI 100

Applicant, Patentee, or Identifier: Frank B. Dean and A. Fawad Faruqi  
Application or Patent No.: 09/514,113  
Filed or Issued: February 25, 2000  
Title: METHOD FOR REDUCING ARTIFACTS IN NUCLEIC ACID AMPLIFICATION

I hereby state that I am

- ☐ the owner of the small business concern identified below:  
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN Molecular Staging Inc.

ADDRESS OF SMALL BUSINESS CONCERN 66 High Street  
Guilford, Connecticut 06437

I hereby state that the above identified small business concern qualifies as a small business concern as defined in 13 CFR Part 121 for purposes of paying reduced fees to the United States Patent and Trademark Office. Questions related to size standards for a small business concern may be directed to: Small Business Administration, Size Standards Staff, 409 Third Street, SW, Washington, DC 20416.

I hereby state that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- ☐ the specification filed herewith with title as listed above.  
☒ the application identified above.  
☐ the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern, or organization having rights in the invention must file separate statements as to their status as small entities, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization having any rights in the invention is listed below:

- ☒ no such person, concern, or organization exists.  
☐ each such person, concern, or organization is listed below.

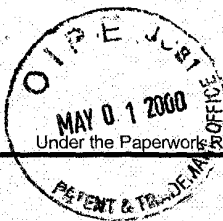
Separate statements are required from each named person/concern or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

NAME OF PERSON SIGNING STEPHEN F. KINGSMORE  
TITLE OF PERSON IF OTHER THAN OWNER CHIEF OPERATING OFFICER  
ADDRESS OF PERSON SIGNING 66 HIGH ST., GUILFORD, CT 06437  
SIGNATURE Stephen F. Kingmore DATE 4-14-2000

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MSI 100 15122/2



**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Frank B. Dean and A. Fawad Faruqi

Application No./Patent No.: 09/514,113 Filed/Issue Date: February 25, 2000

Entitled: METHOD FOR REDUCING ARTIFACTS IN NUCLEIC ACID AMPLIFICATION

Molecular Staging, Inc. a Corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or  
2. ☐ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☐ Copies of assignments or other documents in the chain of title are attached.

**[NOTE:]** A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8]

The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the assignee.

4-14-2000  
Date

Stephen F. Kingsmore  
Signature

STEPHEN F. KINGSMORE  
Typed or printed name

CHIEF OPERATING OFFICER  
Title

## ASSIGNMENT

We, Frank B. Dean of 21A Pearl Street, Guilford, Connecticut 06437, and A. Fawad Faruqi of 985 Durham Road, Guilford, Connecticut 06437, in consideration of ten dollars and other valuable consideration paid to us by Molecular Staging, Inc., a corporation of the State of Delaware, having its principal place of business at 66 High Street, Guilford, Connecticut 06437, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said Molecular Staging, Inc., its successors and assigns, the entire interest for the United States of America, and its territories and all foreign countries and jurisdictions, including all rights of priority under the International Convention for the Protection of Industrial Property, in a certain invention or improvement in "*Method for Reducing Artifacts in Nucleic Acid Amplification*" described in U.S. Serial No. 09/514,113 filed in the United States Patent and Trademark Office on February 25, 2000, by Frank B. Dean and A. Fawad Faruqi, and in all Letters Patent of the United States and its territories and all foreign countries and jurisdictions which may or shall be granted on said invention, or any parts thereof, or on said application, or any provisional, divisional, continuation, continuation-in-part, reissue, or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns, but at its or their expense or charges, hereafter to execute all applications, amended specifications, deeds or other instruments, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and its territories and in all other foreign countries and jurisdictions to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation, and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

Title: "Method for Reducing Artifacts in Nucleic Acid Amplification"  
By: Frank B. Dean and A. Fawad Faruqi  
Filed: February 25, 2000  
ASSIGNMENT

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this 14<sup>th</sup> day of March, 2000.

Frank B. Dean

Frank B. Dean

State of Connecticut )  
County of NEW HAVEN ) Guilford

Then personally appeared the above named Frank B. Dean and acknowledged the foregoing instrument to be his free act and deed, before me this 14<sup>th</sup> day of March, 2000.

JANICE G. TEFT  
Notary Public  
State of Connecticut  
My Comm. Expires Jan. 31, 2005

Janice G. Teft  
Notary Public

My Commission expires: \_\_\_\_\_

Title: "Method for Reducing Artifacts in Nucleic Acid Amplification"  
By: Frank B. Dean and A. Fawad Faruqi  
Filed: February 25, 2000  
ASSIGNMENT

WITNESS my hand and seal this 14<sup>th</sup> day of March, 2000.

A. Fawad Faruqi  
A. Fawad Faruqi

State of Connecticut )  
County of NEW HAVEN ) GUILFORD

Then personally appeared the above named A. Fawad Faruqi and acknowledged the foregoing instrument to be his free act and deed, before me this 14<sup>th</sup> day of March, 2000.

JANICE G. TEFT  
Notary Public  
State of Connecticut  
My Comm. Expires Jan. 31, 2005

Janice G. Teft  
Notary Public

My Commission expires: \_\_\_\_\_